Joint Operational Fires

A 1st BCD Perspective from Operation Iraqi Freedom

Field Artillery and Joint Fires Conference
October 2003

Purpose

- **Provide unclassified insights into the good and bad of joint operational fires during OIF (MCO) from 1st BCD perspective**
- **Identify lessons learned for the Army and Joint fires community**

Agenda

- Background
- The Good
- The Bad with recommendations to improve…
  - Service and joint C4I functionality
  - Training Army leaders to function more effectively in joint/ operational fires environment
  - The role/ capability of Battlefield Coordination Detachments
- Conclusion

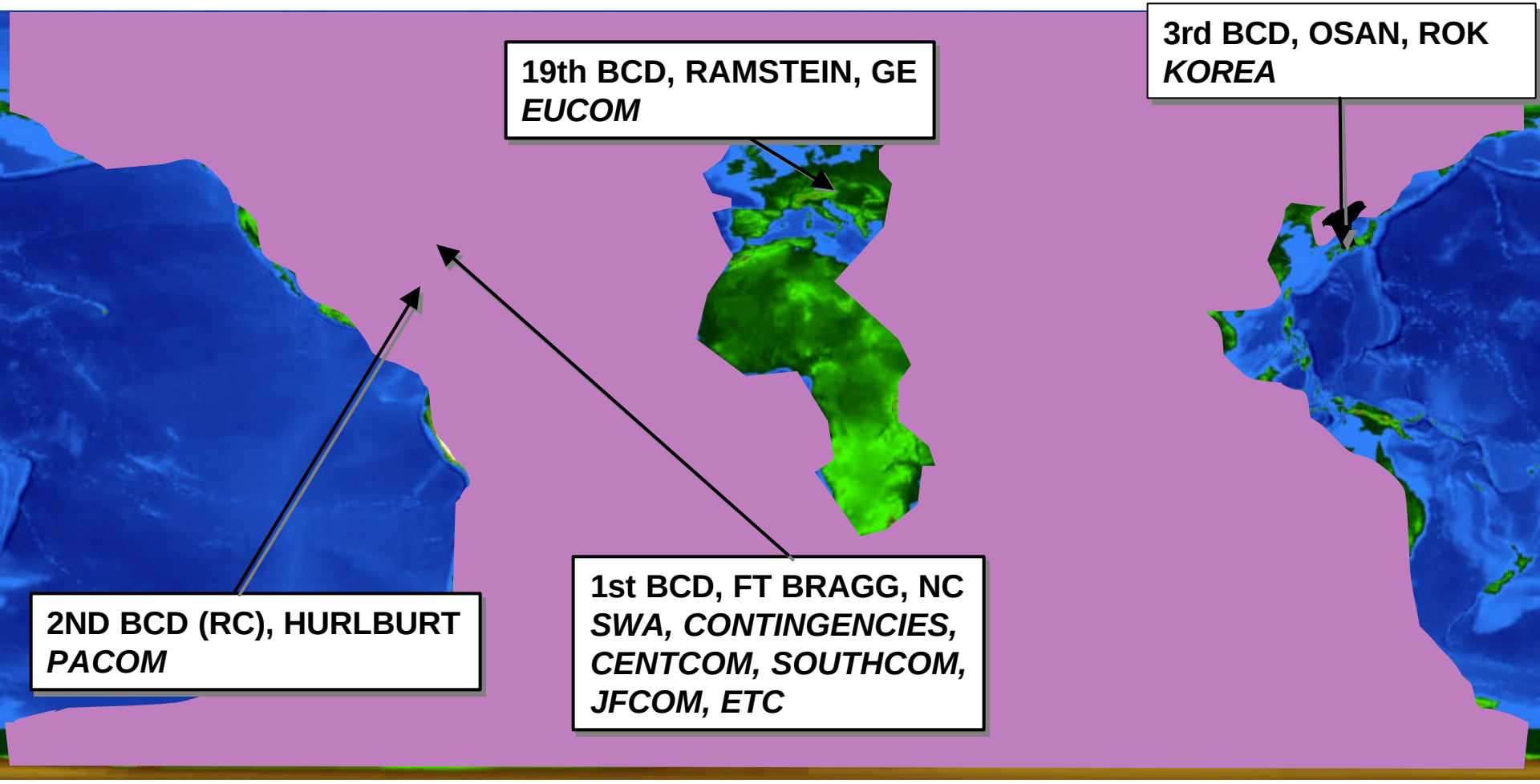
Background

- BCD “101” (-)
- CFACC’s 5 “Fights”
- Theater Air-Ground System (TAGS)
- Air Force Operational distances
- Complex Airspace
- KI CAS CONOP

BCD MISSION

- REPRESENT THE ARMY FORCES (ARFOR) COMMANDER IN THE JOINT/COMBINED AIR OPERATIONS CENTER (JAOC/CAOC).
- FACILITATE THE SYNCHRONIZATION OF AIR OPERATIONS WITH ARMY GROUND OPERATIONS THROUGH THE COORDINATION OF AIR SUPPORT AND THE EXCHANGE OF OPERATIONAL AND INTELLIGENCE INFORMATION.

BATTLEFIELD COORDINATION DETACHMENTS



BCD ORGANIZATION

- COL, FA Commander
- Combined Arms Staff
- Mile-wide / Inch Deep

HQ Element

32D AAMDC provided the ADA Liaison

PLANS SECT | OPNS SECT | INTELL SECT | ADA SECT | AIRSPACE MGMT SECT | AIRLIFT SECT

16 x Officers

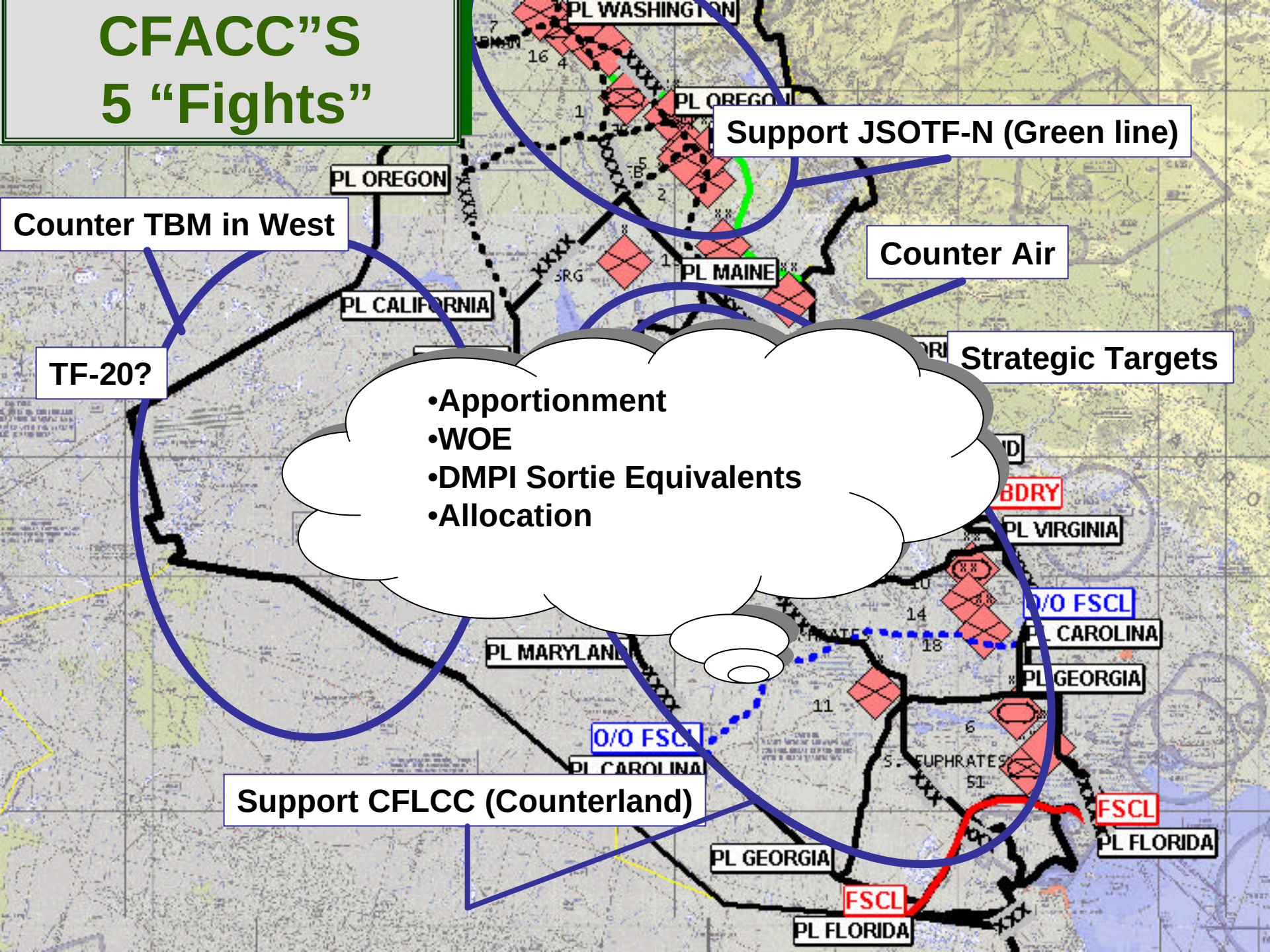
2 x Warrant Officers

22 x Enlisted

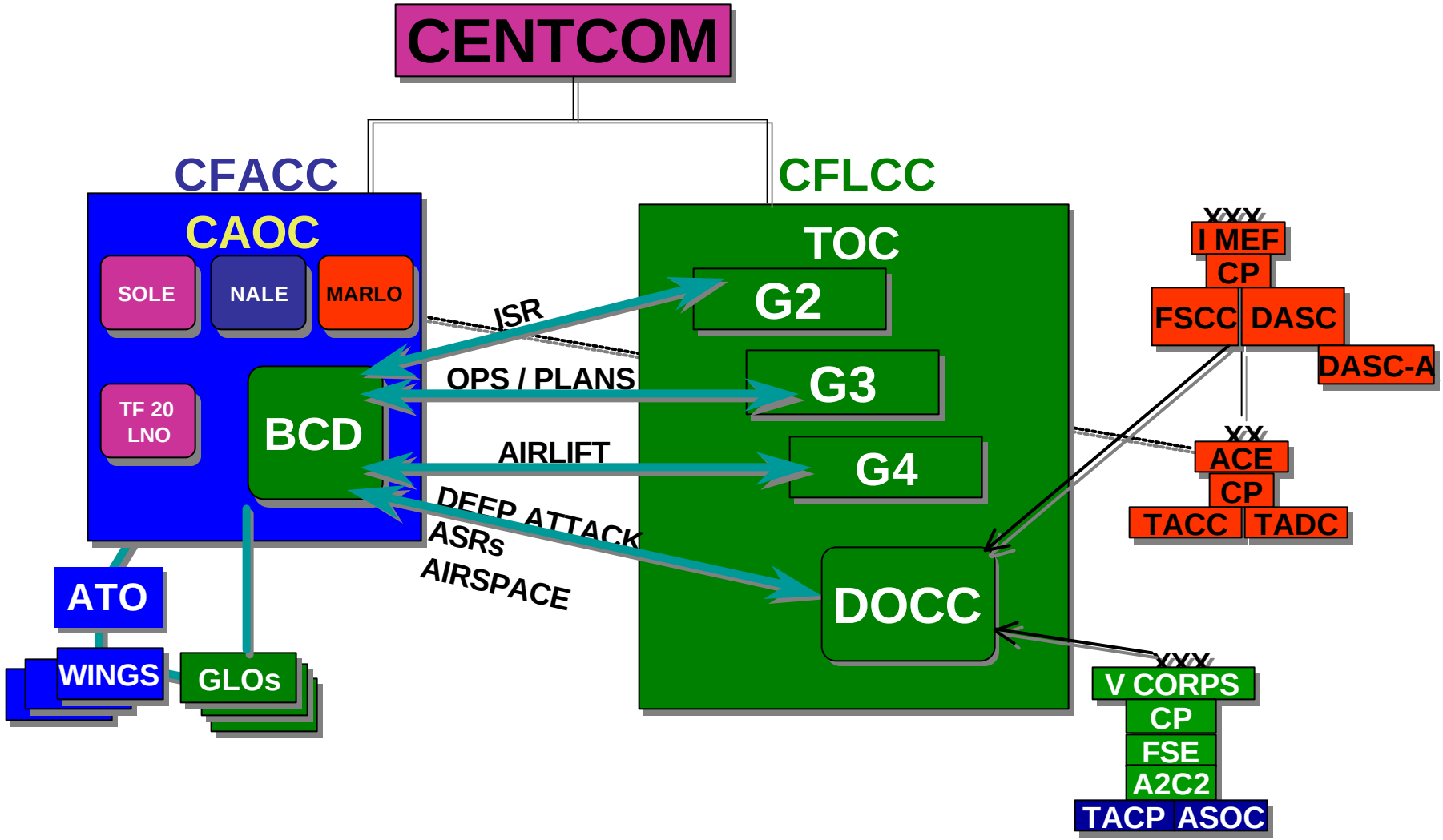
40 Total PAX

Augmented with 2 Marines and 2 UK officers for OIF

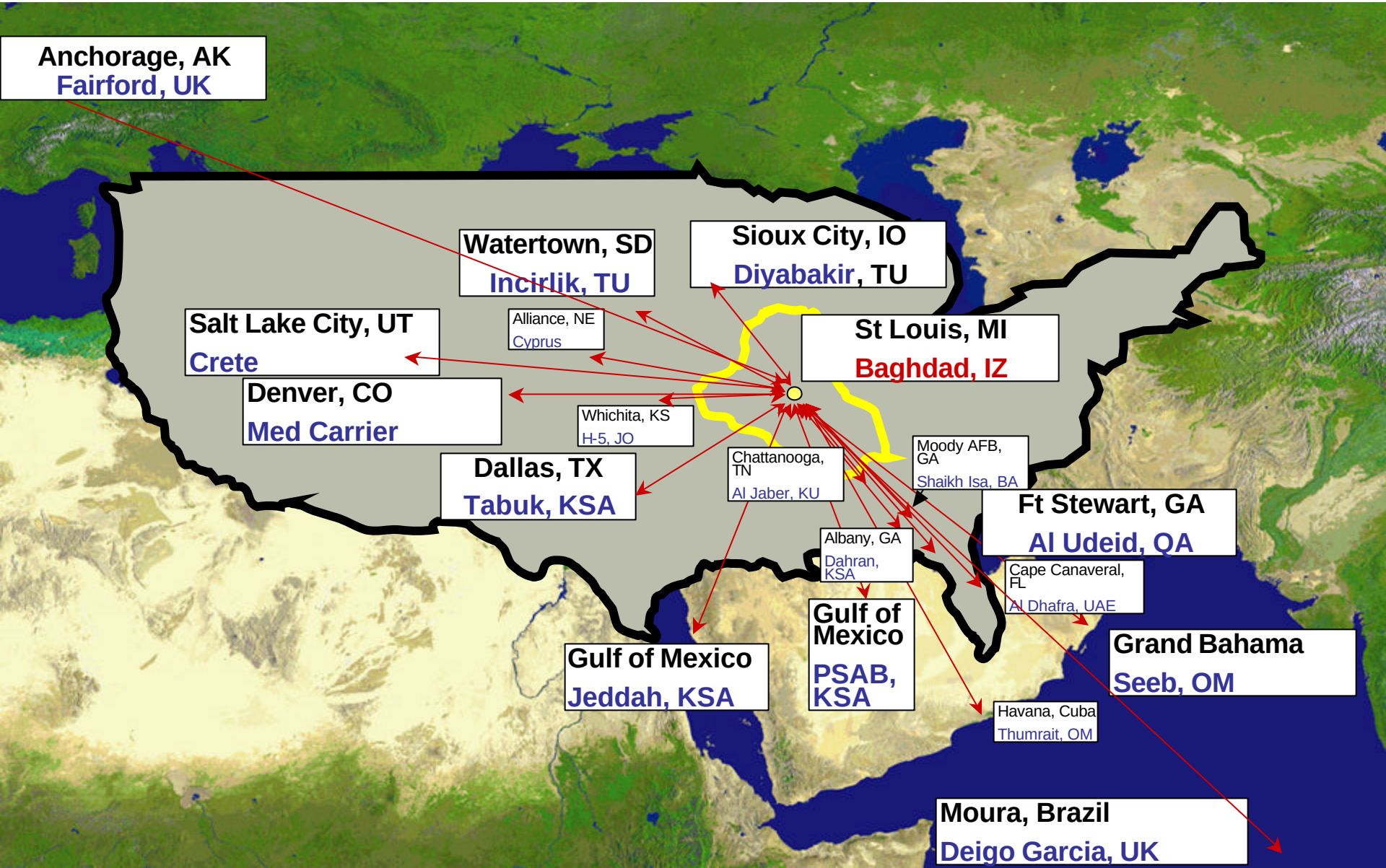
CFACC"S 5 "Fights"



Theater Air Ground System (partial)

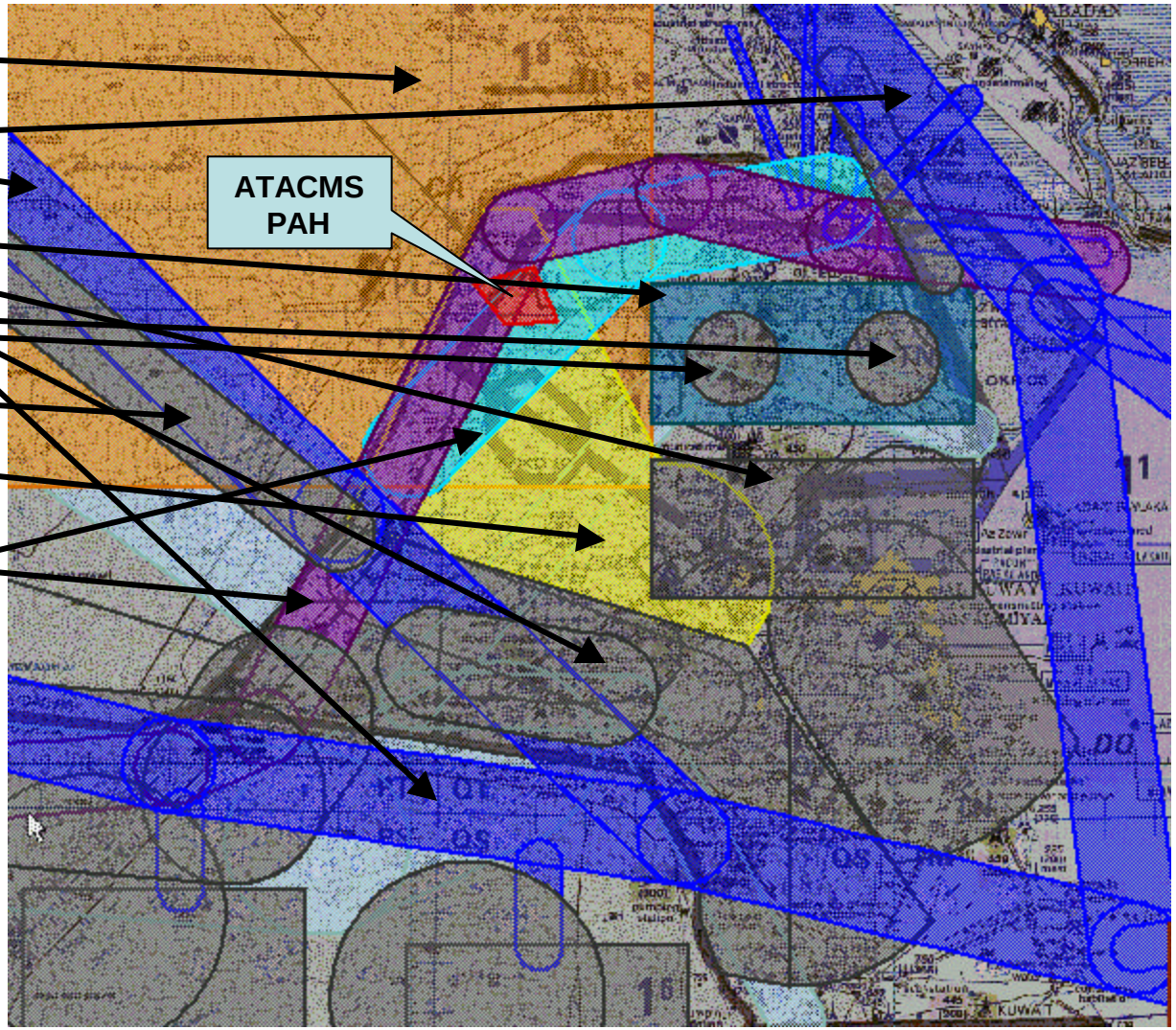


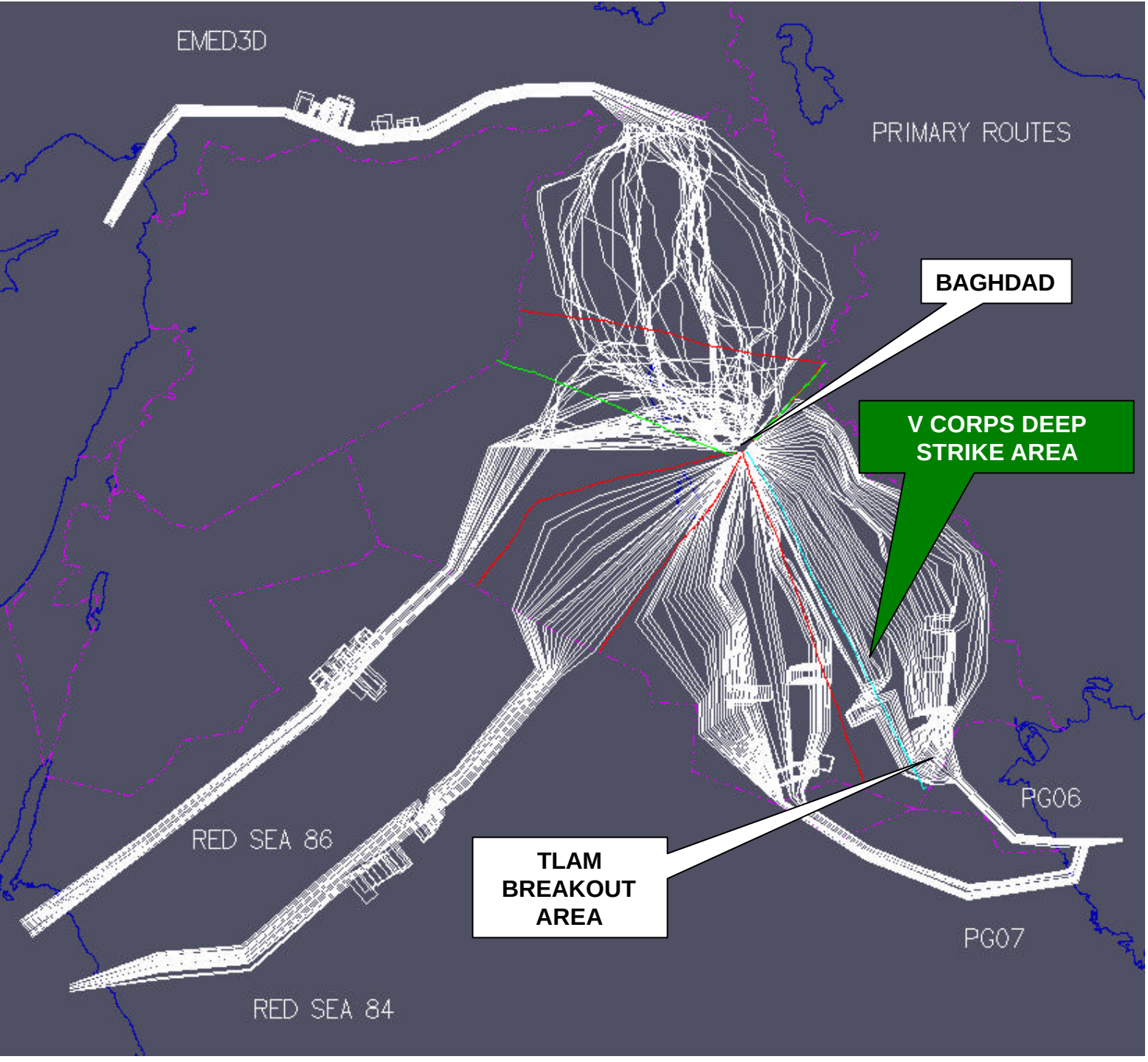
OIF AF Operational Distances



Complex Airspace (ACO M)

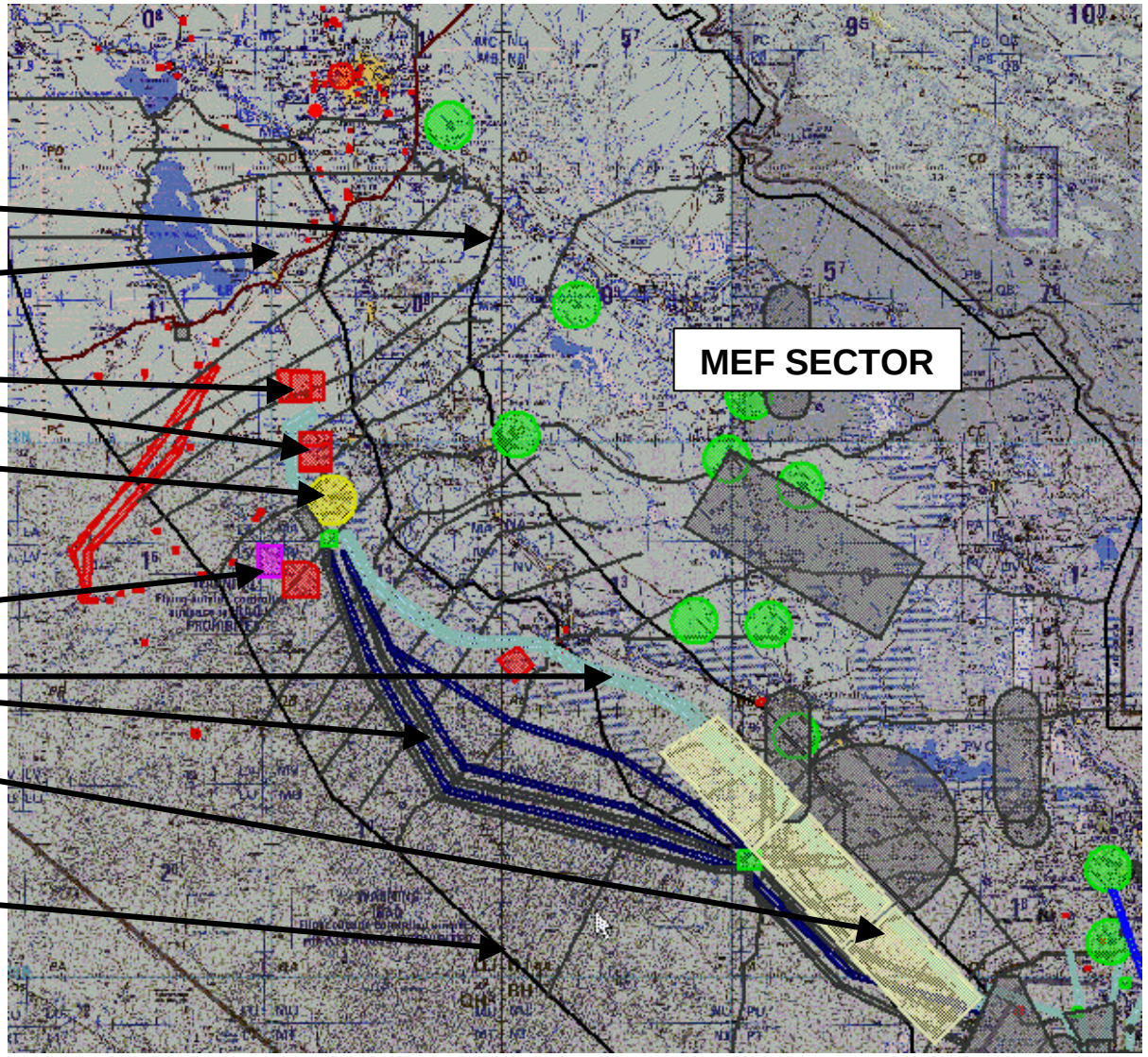
- UAV Blanket
- Driveways
- Aerial Refueling
- CAS Areas
- U2 Track
- Kuwait ATC Zone
- EP-3, P-3 SIGINT Track



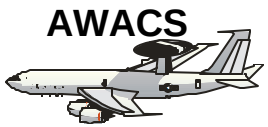

EMED3D
PRIMARY ROUTES
BAGHDAD
V CORPS DEEP STRIKE AREA
PG06
TLAM BREAKOUT AREA
PG07
RED SEA 86
RED SEA 84

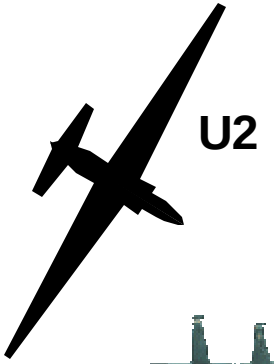
Complex Airspace (ACO Y- LOW LEVEL)

- INTERCORPS BNDRY
- FSCL
- ATACMS PAH
- LSA BUSHMASTER CLASS D
- MAINT TEST FLT ROZ
- HELO ROUTES
- SOF HELO AERIAL REFUEL AREA
- CFLCC WEST BNDRY

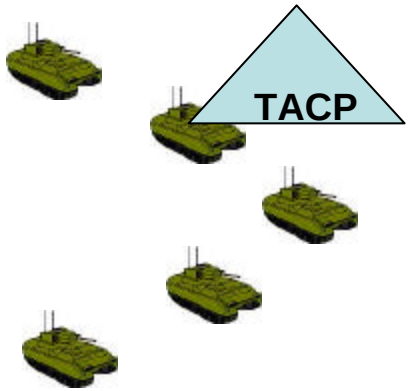


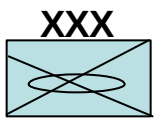
KI CAS





FSCL



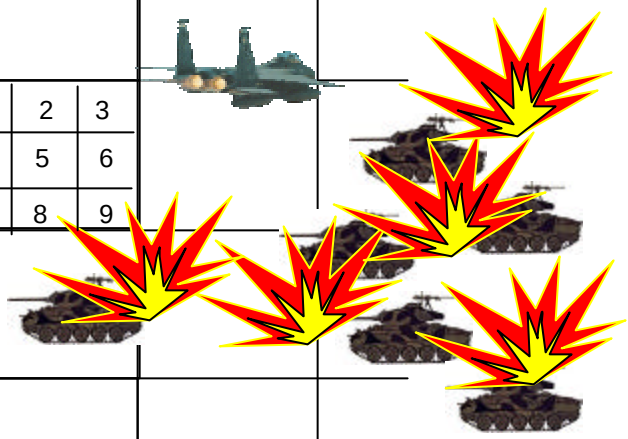


ASOC

1	2	3
4	5	6
7	8	9

1	2	3
4	5	6
7	8	9

1	2	3
4	5	6
7	8	9



FSCL

KI CAS CONOP Issues

- Theater TTP- not doctrine
- Airspace, FSCM and or Target
- Need to add to TTP to better use C4I
- Need to improve C4I to leverage
  - KB COP and in AFATDS
  - Rapid dissemination to the ground and the cockpit
- Good TTP for mobile targeting—implications for our ASR system

The “Good”

“There were episodes in the fight when operational maneuver caused the enemy to react; when the enemy reacted it allowed us to employ joint fires against him which, in turn, allowed our operational maneuver to be more successful.

Our joint fires were very effective. We had CAS in abundance.

First, the Army should give the Air Force credit for being as good as it is. We’ve got the best Air Force in the world.

We’ve got to put a joint context in virtually all our training.”

LTG Wallace, CDR, V Corps, FA Magazine

Visibility of Army operations to the joint force

- **Aviation and ATACMS on ATO**
- **Airspace in ACO**
- **Frequency coordination (Counterfire Radars)**
- **Fratricide avoidance in spins**
- **Impact of Blue Force Tracker (BFT)**

Mutual operational support between the Air and Land

- Air Component provided Land FOM, shaping and CAS
- Each component provided enablers to the other
  - ISR
  - C2
  - SEAD / DEAD
  - Personnel Recovery
- Land Component integrated air effects into targeting plan (EFSTs)
- Land provided direct and indirect SEAD- enabled Air maneuver
- “Mother of all storms”JDAM “Fest”
- Coordinated FSCL and Battlespace (Killbox CONOP)

The Bad:
Service and Joint C4I interfaces

- **Too many partially redundant systems**
- **Battlefield Damage Assessment (BDA)**
- **AFATDS- TBMCS Interface**

Too many partially redundant systems

System	PLANS Internal			ITEL al
2 x AFATDS (V. 6.3.1) Advanced Field Artillery Tactical Data System (Fire Support)	1			
2 x ASAS (V. 4.6.0.1) All Source Analysis System (Intelligence)	1			
3 x ADOCS (V. 8.5.1.24) Automated Deep Operations Coordination System				
2 x TAIS (V. 8.3) Tactical Air Integration System (Air Space)	1			N/A
1 x AMDWS (V 1.1c) Air Missile Defense Work Station (Air Defense)	N/A	N/A		N/A
SIPRNET/NIPERNET	10/7	5/3	3/3	3/3
C2PC (V. 5.5.7.2) Command & Control PC				
6 X TBMCS (V. 1.1) Theater Battle Management Core System	4	1	N/A	1
4 x EMT Effects Management Tool (FS Local Client, AFATDS Server)	2	1	N/A	1
MIRC (chat)	10	5	3	3
IWS (V. 2.5.1) Info-Work Space	10	5	3	3
ITS Interim Targeting Solution		N/A	N/A	N/A

21 PAX per shift:
43 computer boxes
SIPR/ NIPR/ JWIC
4 "Chats"
4 "COPS"
Default: Excel and PPT!

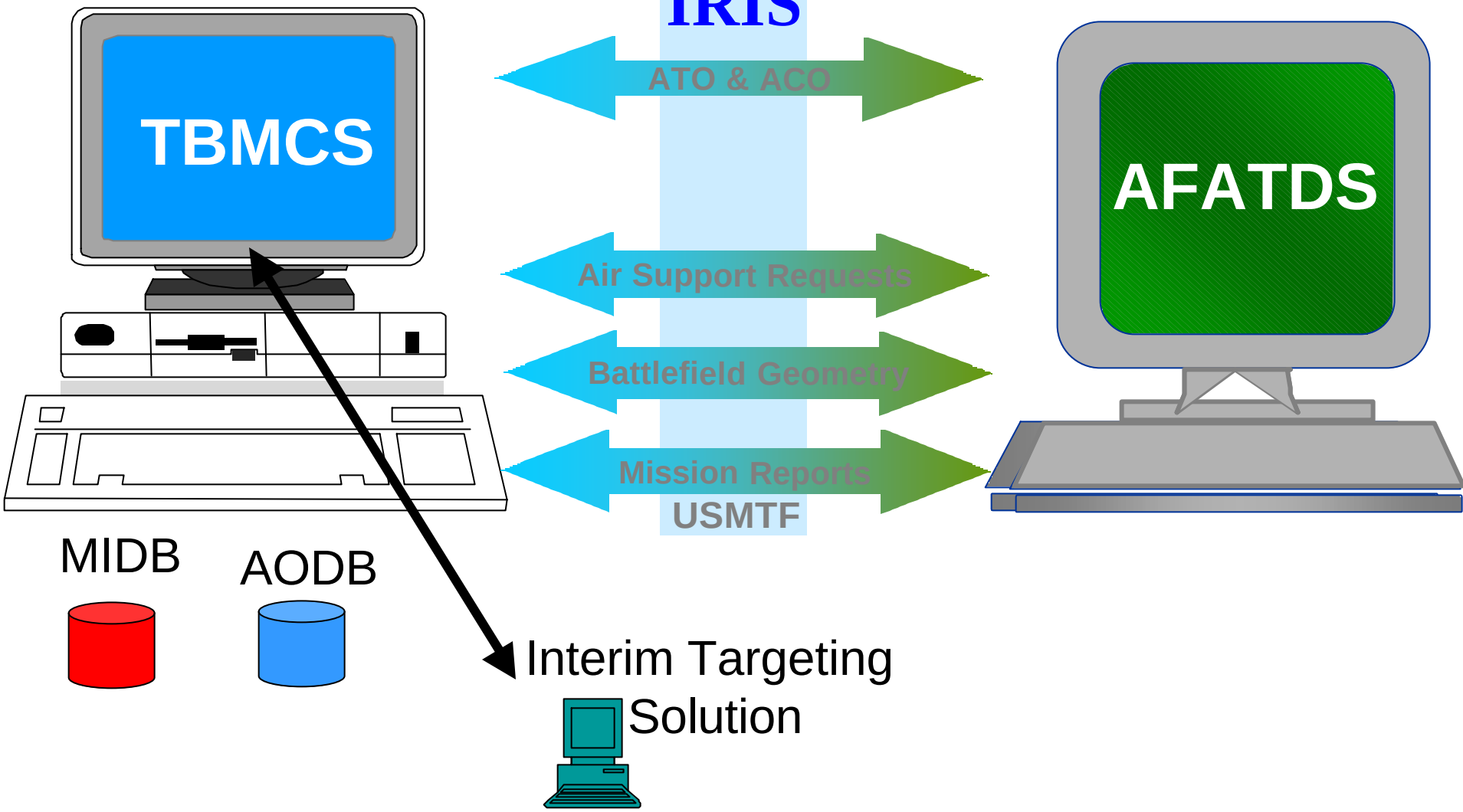
BDA Reporting

- **Lack of Pilot Reporting and BDA hampered Targeting Processes**
  - **CFLCC (and CFACC) lacked knowledge of what targets were hit and what the effects on the target were (Level 1 BDA)**
  - **Pilot Reports not provided as planes came off target**
  - **MISREPS several days old**
- **Standardized language needed in PIREPs so report is clearly understood**
- **BDA challenges in effects based operations**

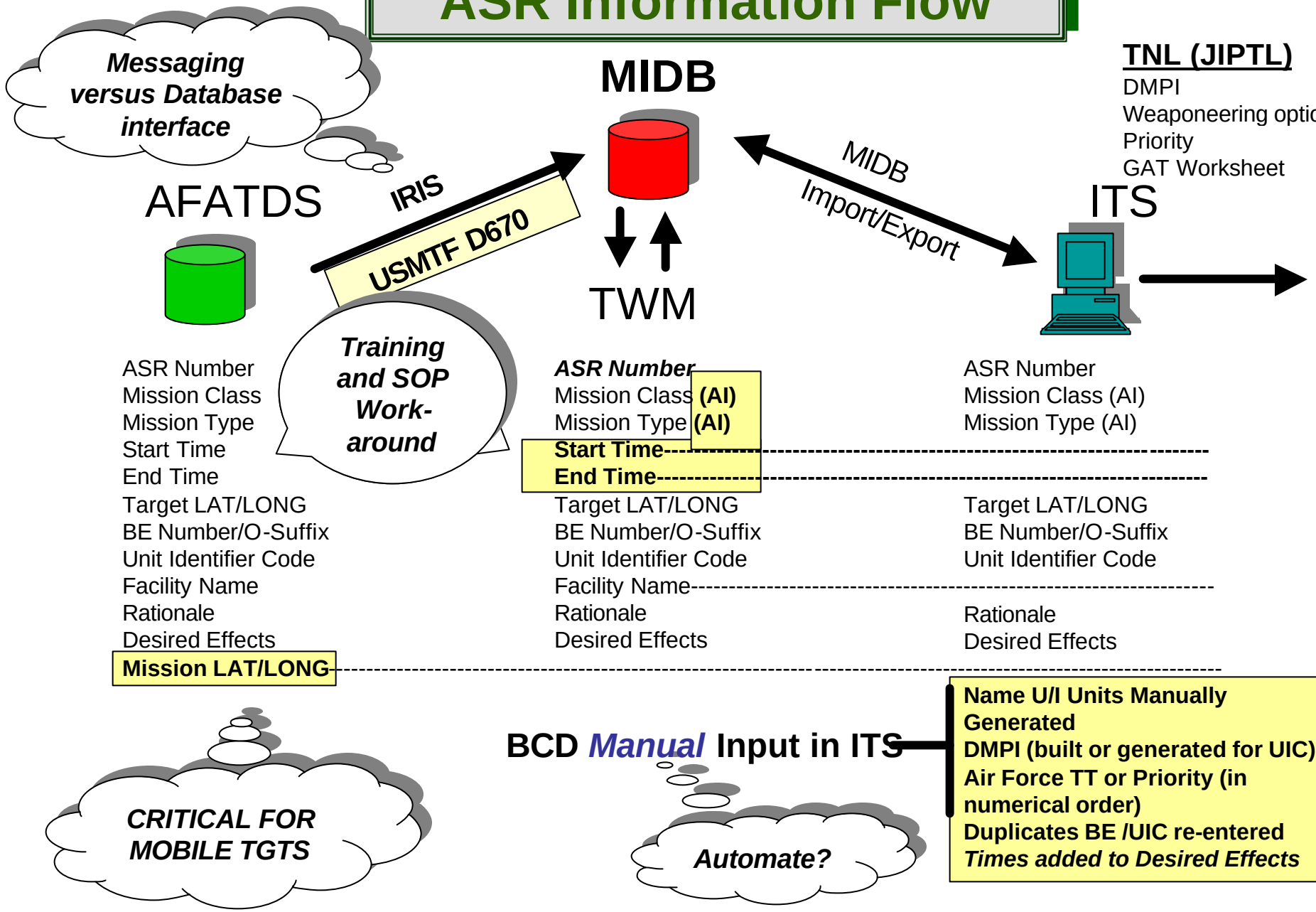
BDA Recommendations

- **Discipline the system: reports and format**
- **Process needs to be in place to standardize PIREPS and communication flow**
- **System needs to be devised to transmit WSV rapidly to intel centers for BDA analysis.**
- **Accurate MISREPS and Phase I BDA provided NLT 12 Hours after strike.**
- **Automate phase I BDA by ordnance “death calls”**
- **Rethink range of Battlefield Damage Indicators that with phase I BDA could provide better phase II BDA (functional assessment**

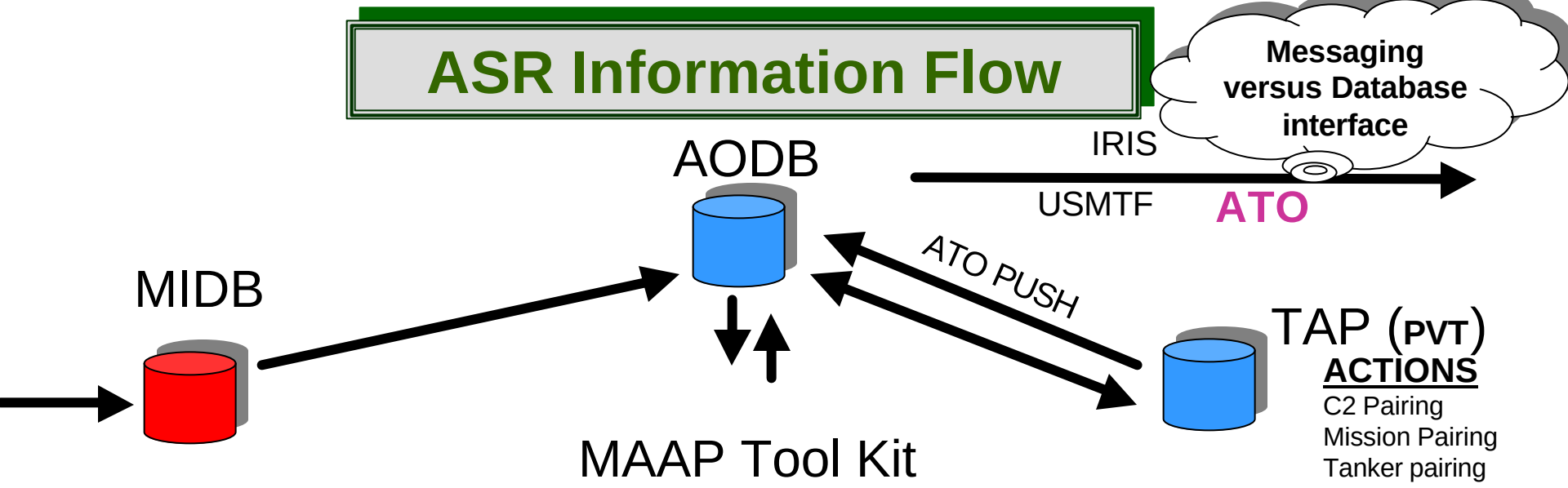
TBMCS1.1.1 v AFATDS 6.3.1a



ASR Information Flow



ASR Information Flow



ASR Number
Mission Class (AI)
Mission Type (AI)
Target LAT/LONG
BE Number/O-Suffix or
Unit Identifier Code
Rationale
Desired Effects
DMPI
Priority
Times in Desired Effects
Weaponeering Data

Tactical Task

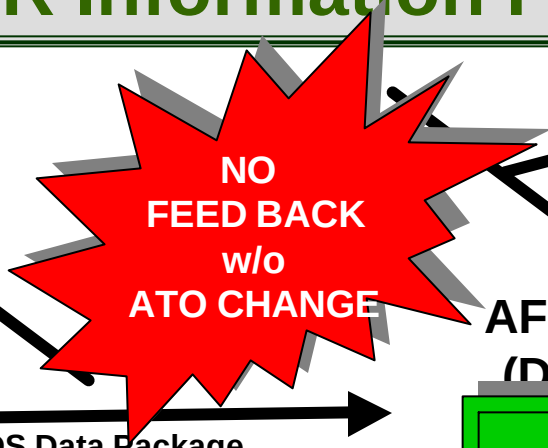
ASR Number
Mission Class (AI)
Mission Type (AI)
Target LAT/LONG
BE Number/O-Suffix or
Unit Identifier Code
Rationale
Desired Effects
DMPI (built or generated for UIC)
Priority (in numerical order)
Times in Desired Effects
Weaponeering Decision
TOT
SCL
Pairs assets to TGTS
Remarks

ASR Number
Mission Class (AI)
Mission Type (AI)
Target LAT/LONG
BE Number/O-Suffix or
Unit Identifier Code
Rationale
Desired Effects
DMPI
Priority
Time in Desired Effects
Weaponeering Data

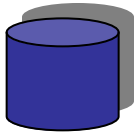
Implications for OP Assessment

ASR Number *Lost* if Mission planned to air space

ASR Information Flow

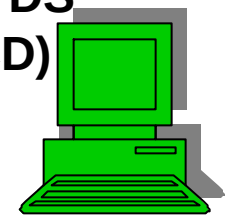


AODB



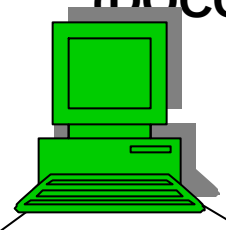
ATO EXECUTION
Mission data
Re-Roles
PIREP
MISREP

AFATDS (BCD)

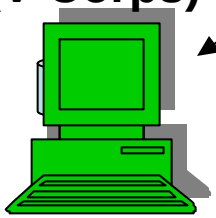


AFATDS Data Package Transfer

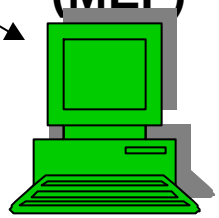
AFATDS (DOCC)



AFATDS (V Corps)



AFATDS (MEF)



ASR Number
Mission Class
Mission Type
Start
End Time
Target LAT/LONG
BE Number/O-Suffix
Unit Identifier Code
Facility Name
Rationale
Desired Effects
Additional Air INFO
TOT
SCL
Remarks

Mission LAT/LONG

A USMTF TEXT COPY OF ATO and ACO MESSAGE CAN BE PUSHED

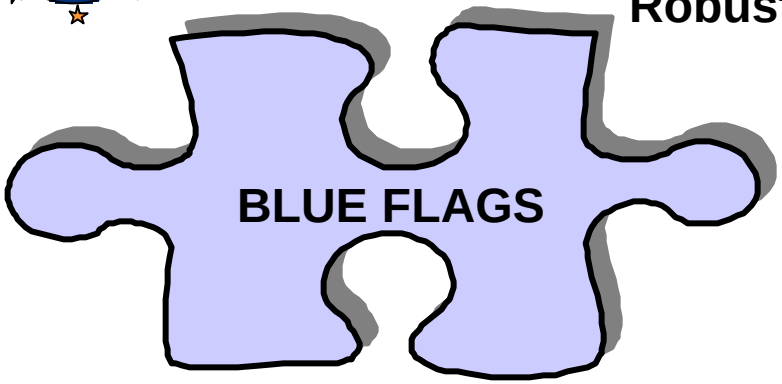
BUT INADEQUATE VIEW/ DISPLAY TOOLS

WOC
Mission data
TO / Landing
MISREP

AFATDS-TBMCS Recommendations

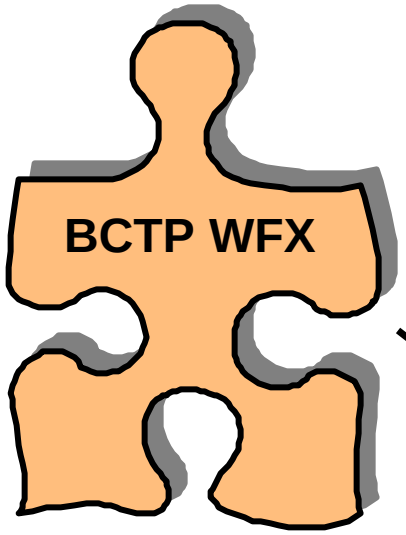
- **IMMEDIATE:**
  - **Build an ASR REQ NO. capability in all mission types in TBMCS**
  - **Increase ability to write all ASR mission types to MIDB**
  - **Add a target location field to the MIDB that supports targeting vice intel**
  - **Automate the data entry for ITS/ GAT requirements**
- **NEAR TERM**
  - **The requirement between all systems should be to transfer data via relational databases- XML?**
  - **Require all systems in the targeting process to conform to standardized data base construction rules to allow ease of data transfer between systems**
  - **All <u>defined and appropriate</u> data points need to transfer when data packages are transported between systems. If needed, provide filtering capability to filter data viewed by specific users**

Improve Collective training



Robust and Dynamic

Better M&S



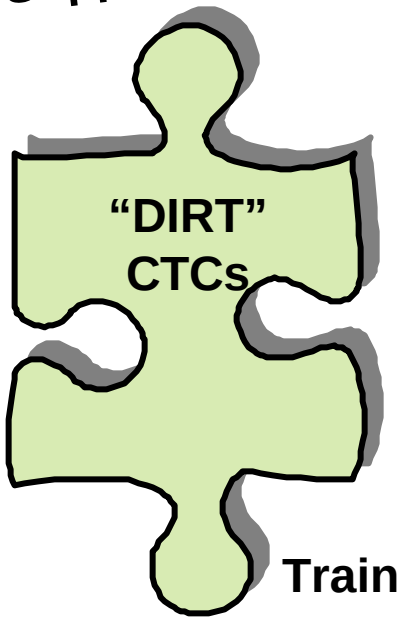
Higher Fidelity

Support Complete Targeting Cycle

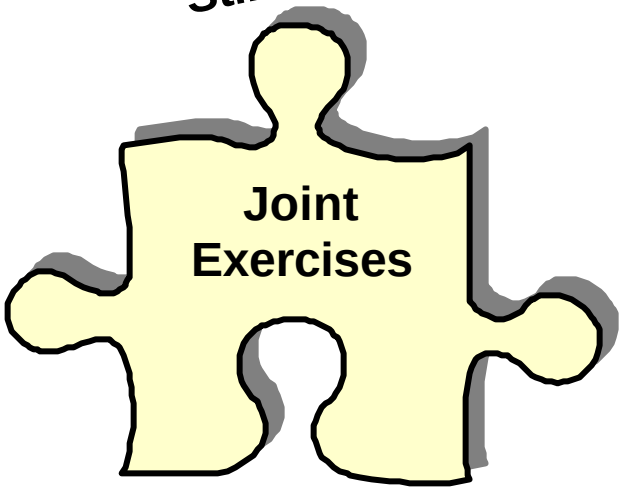
Standardize theater SOPs

Stimulate real -world C4I

Realistic Effects



Proper Joint Context



Train as we Fight

Improve Institutional Training

- **Improve USAFAS and CGSC curriculum**
  - **ATO planning cycle and how the Army can interact and integrate successfully**
  - **Understand how the Air Force generates combat power**
    - **Concept of flow**
    - **Impact of carriers, air refueling, low density high demand assets**
    - **Concept of Air Force C2 and controlling agencies**
    - **Once resourced, air is flexible in location, less so in time**
- **Leverage existing AF Schools for personnel slated for Division and higher operations/ plans staff**
  - **JATOPC: Div and higher FECC folks, AV BDE staff, BCD**
  - **JSSC: Army O5/ O6- D/A CDR, AV BDE CDR, Div / Corps G3**
  - **JFACC Course: ADC (O)/ (M), DIV CDR**

Improve Training

- **Rethink mobile targeting process**
  - **Effects based not sortie or bomb based**
  - **Top Down vice Bottom-up**
  - **CAS may be less efficient but more effective**
  - **Resource targeting effects in geographic areas (killboxes) during ATO development**
    - **ISR**
    - **airspace**
    - **C2 plan**
    - **Delivery system**
    - **Logistic support**
    - **BDA**
  - **Decide the target during ATO execution**

Importance of the BCD

- **Located at the nexus of land and air**
- **Helps bridge the seams**
- **More important to support for smaller, modular land force**
- **Enhances “plug and play” into joint force**

BCD Pre-OIF Challenges

- **Impact of OEF**
- **Manning / end strength**
- **Turn-over**
- **Army vs. Air Force ramp-up**
- **IMPACT of multiple CENTAF CAOCs**

Enhance BCD Capability

Track BCD “graduates”-
Fix ASI

131A not coded
For
5U ASI?

Proponent?

More
BCDs?

Man w/
“Right” People

Training: JATOPC
FTU?,

Training & System
Support:
Fund AJAST

Summary

- Background
- The Good
- The Bad with recommendations to improve…
  - Service and joint C4I functionality
  - Training Army leaders to function more effectively in joint/ operational fires environment
  - The role/ capability of Battlefield Coordination Detachments

QUESTIONS?

Joint Operational Fires

A 1st BCD Perspective from Operation Iraqi Freedom

Field Artillery and Joint Fires Conference
October 2003